

PSYC W2460: Drugs and Behavior
Professor Carl Hart

Spring 2016 Syllabus

This course examines the use of psychoactive drugs, using this topic to explore human behavior: from the interactions between chemicals and neurons to the psychological and physiological effects on the individual to the impact on society; we will touch on topics relating to biology, pharmacology, neuroscience, chemistry, anthropology, history, law, sociology, and political science. The effects of psychoactive drug use on the brain and on behavior will help us to understand human behavior in a biological context; the effects of psychoactive drug use on society will help us to understand the behavior of social and political groups and how they influence the individual.

Classes and Examinations.

This course will consist mainly of lectures, which will provide a more in-depth analysis of issues covered in the readings as well as information not covered in the readings. Lectures are divided into seven sections; there will be three exams consisting of multiple-choice, short answer, and essay questions. The first exam will cover sections 1 and 2 and associated readings and the second exam will cover sections 3 - 5 and associated readings. Although the final exam will focus primarily on sections 6 and 7 and associated readings, it will also cover materials cumulatively for the entire course. In addition, there will be unannounced quizzes that will be completed during class. Quizzes will consist of short answer and essay questions based on the previous lecture and on the assigned reading(s). If you are not present at the time a quiz is given you will receive a zero on that quiz. To make up for this draconian policy, however, I will drop your lowest quiz score. Thus, if you miss a quiz, this zero will be dropped.

Percentage of grade

First and Second Exams	25% each
Cumulative Final Exam	40%
Unannounced Quizzes	10%

Grading Scale

97-100% -	A+	77-79% -	C+
93-96% -	A	73-76% -	C
90-92% -	A-	70-72% -	C-
87-89% -	B+	60-69.9% -	D
83-86% -	B	Below 60% -	F
80-82% -	B-		

Because of the size of this class, it will not be possible to schedule alternative exam times for students who have difficult examination schedules, travel plans, etc. An unexcused absence from any of the exams will result in a grade of F on that exam. To be excused from an exam you must personally notify Prof. Hart before the exam and must present some evidence certifying

the legitimacy of your absence (e.g., doctor's note). Make-up exams will be composed of short answer and essay questions primarily, and will be completed no later than one week following the missed scheduled exam.

Academic Integrity

Students are expected to do their own work on all tests and assignments for this class and act in accordance with the [Faculty Statement on Academic Integrity](#) and [Honor Code](#) established by the students of Columbia College and the School of General Studies. Because any academic integrity violation undermines our intellectual community, students found to have cheated, plagiarized, or committed any other act of academic dishonesty can expect to receive a zero for the work in question and may be referred to the Dean's Discipline process.

It is students' responsibility to ensure their work maintains the standards expected and should you have any questions or concerns regarding your work, you can:

- a) talk with your TA;
- b) ask the instructor; and/or refer to the [Columbia University Undergraduate Guide to Academic Integrity](#).

Spring 2016 Schedule

Course Introduction

(Tue Jan 19, 2016 02:40 PM - 03:55 PM)

An overview of the course will be presented with emphasis being placed on the fact that the overwhelming majority of information presented throughout the semester will be evidence-based. For some, the phrase evidence-based implies objectivity and neutrality. We will see that this may not be the case when it comes to the study of recreational drugs.

Required Reading:

Hart CL (2014) Why Research is Biased Against Pot to Focus on its Harm and not its Benefits. Dallas News (Op-Ed) September 11, 2014

Measuring the extent of drug use

(Thu Jan 21, 2016 02:40 PM - 03:55 PM)

During this session, we will learn how drug use rates are determined. We will also discuss benefits and limitations of the current approaches.

Required Readings:

Text (Chapter 1)
Compton et al. 2016

Drug use as deviant behavior

(Tue Jan 26, 2016 02:40 PM - 03:55 PM)

The discussion will focus on drug use viewed as a form deviant behavior, which allows us to help to demystify it and permits comparisons with other forms of behavior.

Required Readings:

Text (Chapter 2)
Brecher 1972

Drug Control - The war on Drugs

(Thu Jan 28, 2016 02:40 PM - 03:55 PM)

During this session, we discuss the impact of U.S. drug control strategies.

Required Readings:

Text (Chapter 3)

Hart CL (2014) How the Myth of the 'Negro Cocaine Fiend' Helped Shape American Drug Policy. *The Nation* (Op-Ed) January 29, 2014: <http://www.thenation.com/article/how-myth-negro-cocaine-fiend-helped-shape-american-drug-policy/>

Introduction to Dopamine

(Tue Feb 02, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text 4

Handout on neuronal communication

Brain Imaging: What's in a pretty picture?

(Thu Feb 04, 2016 02:40 PM - 03:55 PM)

Required Readings:

Gilman, Jodi M., et al. "Cannabis use is quantitatively associated with nucleus accumbens and amygdala abnormalities in young adult recreational users." *The Journal of Neuroscience* 34.16 (2014): 5529-5538.

More Dopamine

(Tue Feb 09, 2016 02:40 PM - 03:55 PM)

Determining drug effects: Pharmacokinetics

(Thu Feb 11, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 5)

Hart CL (2013) Reefer Madness, an Unfortunate Redux. *The New York Times* (Op-Ed) July 11, 2013:

Exam 1

(Tue Feb 16, 2016 02:40 PM - 03:55 PM)

Environmental/Psychosocial factors: treatment implications

(Thu Feb 18, 2016 02:40 PM - 03:55 PM)

Required Readings:

Hart CL, Haney M, Foltin RW, Fischman MW (2000) Alternative reinforcers differentially modify cocaine self-administration by humans. *Behavioural Pharmacology* 11, 87-91.

Crack Cocaine: The most dangerous drug ever?

(Tue Feb 23, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 6)

Methamphetamine and adderall: are they the same?

(Thu Feb 25, 2016 02:40 PM - 03:55 PM)

Required Readings:

Kirkpatrick MG, Gunderson EW, Johanson CE, Levin FR, Foltin RW, Hart CL (2012) Comparison of intranasal methamphetamine and d-amphetamine self-administration by humans. *Addiction* 107, 783-91.

Hart CL, Marvin CB, Silver R, Smith EE (2012) Is cognitive functioning impaired in methamphetamine users? A critical review. *Neuropsychopharmacology* 37, 586-608.

Sedatives and Hypnotics

(Tue Mar 01, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 7)

Do antidepressant medications work?

(Thu Mar 03, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 8)

Turner EH, Matthews AM, Linardatos E, Tell RA, Rosenthal R (2008). Selective publication of antidepressant trials and its influence on apparent efficacy. *New England Journal of Medicine*, 358, 252-260.

Alcohol: environment, genetics, & pharmacology

(Tue Mar 08, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 9)

Caffeine

(Thu Mar 10, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 11)

Spring Break

(Tue Mar 15, 2016 02:40 PM - 03:55 PM)

Spring Break

(Thu Mar 17, 2016 02:40 PM - 03:55 PM)

Tobacco/Nicotine: agricultural product or killer weed

(Tue Mar 22, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 10)

Supplements: how should they be regulated?

(Thu Mar 24, 2016 02:40 PM - 03:55 PM)

Required Readings:

Text (Chapter 12)

EXAM 2 (non-cumulative)

(Tue Mar 29, 2016 02:40 PM - 03:55 PM)

The Study Guide for Exam #2 is posted on CourseWorks.

Prescription opioids: The new heroin
(Thu Mar 31, 2016 02:40 PM - 03:55 PM)

Required Readings:
Text (Chapter 13)

The resurgence of hallucinogens
(Tue Apr 05, 2016 02:40 PM - 03:55 PM)

Required Readings:
Text (Chapter 14)

Marijuana: basic behavioral pharmacology
(Thu Apr 07, 2016 02:40 PM - 03:55 PM)

Required Readings:
Text (Chapter 15)

Medical/Recreational Marijuana
(Tue Apr 12, 2016 02:40 PM - 03:55 PM)

Drug use by athletes
(Thu Apr 14, 2016 02:40 PM - 03:55 PM)

Required Readings:
Text (Chapter 16)

Prevention
(Tue Apr 19, 2016 02:40 PM - 03:55 PM)

Required Readings:
Text (Chapter 17)

Treatment
(Thu Apr 21, 2016 02:40 PM - 03:55 PM)

Required Readings:
Text (Chapter 18)

DRAFT - Writer Maia Szalavitz
(Tue Apr 26, 2016 02:40 PM - 03:55 PM)